

June 28, 1982

USEPA RECORDS CENTER REGION 5



488489

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: The purpose of these records is to provide a convenient way to prepare an auditable record of the data and documentation used to apply the Hazard Ranking System to a given facility. As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference that will make the document used for a given data point easier to find. Include the location of the document and consider appending a copy of the relevant page(s) for ease in review.

FACILITY NAME: COMMONWEALTH EDISON TECHNICAL CENTER

LOCATION: 1319 S. FIRST AVE, MAYWOOD, ILL.

GROUND WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected (5 maximum):

NONE, NO RESULTS OF GROUNDWATER MONITORING FOR
PCB ARE AVAILABLE.

Rationale for attributing the contaminants to the facility:

* * *

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifers(s) of concern:

TREMPEALEAU-FRANCONIA

FROM VILLAGE OF BELLWOOD WATER DEPT, 1983, PHONE CALL TO JIM DENNIS,
Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern: CHIEF, ON 8/25/83

1000 FT

FROM VILLAGE OF BELLWOOD WATER DEPT, 1983, PHONE CALL TO JIM DENNIS, 8/25/83
Depth from the ground surface to the lowest point of waste disposal/ storage: CHIEF

ASSUMED 6 FT.

FROM HRS USER'S MANUAL, 1982

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

36"/YR

FROM HRS USER'S MANUAL, 1982

Mean annual lake or seasonal evaporation (list months for seasonal):

30"/YR

FROM HRS USER'S MANUAL, 1982

Net precipitation (subtract the above figures):

6"/YR

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

FOX-WAUCONDA-SAWMILL SILTY LOAM

FROM COOK-DUPAGE COS. SOIL SURVEY, USDA, SOIL CONSERVATION SERV., 1979
Permeability associated with soil type:

$< 10^{-5} \geq 10^{-7}$ CM/SEC

FROM HRS USER'S MANUAL, 1982
Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

LIQUID

FROM COMMONWEALTH EDISON CO. BEST MANAGEMENT PRACTICES PLAN SUBMITTED
TO ILLINOIS EPA, 4/18/83

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

PCB TRANSFORMERS ARE STORED FOR MAINTENANCE & REPAIR IN A CRUSHED GRAVEL YARD, MOST OF WHICH DRAINS TO A STORMWATER COLLECTION SYSTEM W/ AN OIL-WATER SEPARATOR. THERE IS A POSSIBILITY OF SOME LEAKING PCB LEACHING BELOW GROUND.

FROM TOM KOCH (E+E) SITE INSPECTION OF 8/3/83
Method with highest score:

CONTAINERS LEAKING, MODERATELY PERMEABLE LINER

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

PCB (POLYCHLORINATED BIPHENYLS), ONLY COMPOUND OF CONCERN ON SITE

FROM SITE BEST MANAGEMENT PRACTICES (BMP) PLAN REQUIRED FOR NPDES PERMIT,
Compound with highest score: 4/18/83

PCB

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

1905 GAL

FROM CE BEST MANAGEMENT PRACTICES PLAN, 4/18/83
Basis of estimating and/or computing waste quantity:

FROM AREAS C & E DESCRIBED, WITH PCB QUANTITIES GIVEN, IN SITE BMP PLAN,
4/18/83

5 TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

DRINKING WATER

FROM VILLAGE OF BELLWOOD WATER DEPT, 1983, PHONE CALL TO JIM DENNIS, CHIEF, 8/25/83
Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

SOUTHEAST BELLWOOD, 19TH AVE. NEAR I-290

FROM VILLAGE OF BELLWOOD WATER DEPT, 1983, JIM DENNIS PHONE CALL (CHIEF) 8/25/83
Distance to above well or building:

2.4 MI.

FROM RIVER FOREST, ELMHURST, & BERWYN TOPO MAPS, USGS, 1970
Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

VILLAGE OF BELLWOOD HAS 5 WELLS IN THE AREA
SERVICING A POPULATION OF 19,811.

FROM VILLAGE OF BELLWOOD WATER DEPT, 1983, PHONE CALL TO JIM DENNIS, CHIEF, 8/25/83
Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

NO AGRICULTURAL LAND IN AREA

FROM USGS TOPO MAPS, RIVER FOREST, ELMHURST, HINSDALE, & BERWYN
Total population served by ground water within a 3-mile radius: QUADS.

19,811

SURFACE WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

PCB $\geq 13.1 \mu\text{g/L}$

Rationale for attributing the contaminants to the facility:

VALUES ARE FROM SITE NPDES PERMIT MONITORING PROGRAM OF
SITE OUTFALL, SUBMITTED TO ILLINOIS EPA 2/23/83
THESE VALUES ARE EXCURSIONS OF THE 1.0 PPB LIMIT OF THE NPDES PERMIT.

FROM NPDES PERMIT #ILOO59064, ISSUED 10/12/79 THROUGH ILLINOIS EPA, SPRINGFIELD, IL

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

< 3%

FROM MIKE GIFFORD (E+E) SITE INSPECTION REPORT 8/3/83

Name/description of nearest downslope surface water:

DES PLAINES RIVER

FROM MIKE GIFFORD (E+E) SITE INSPECTION REPORT 8/3/83

Average slope of terrain between facility and above-cited surface water body in percent:

< 3%

Is the facility located either totally or partially in surface water?

No

FROM SITE INSPECTION REPORT 8/3/83

Is the facility completely surrounded by areas of higher elevation?

No

FROM SITE INSPECTION REPORT 8/3/83

1-Year 24-Hour Rainfall in Inches

2.5"

FROM HRS USER'S MANUAL, 1982

Distance to Nearest Downslope Surface Water

1000 FT

FROM SITE INSPECTION REPORT 8/3/83

Physical State of Waste

LIQUID

FROM COMMONWEALTH EDISON Co. BMP PLAN, 4/18/83

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

CONTAINER LEAKING & CONTAINMENT POTENTIALLY UNSOUND

FROM TOM KOCH (E+E) SITE INSPECTION REPORT 8/3/83

Method with highest score:

CONTAINER LEAKING

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

PCB, ONLY COMPOUND OF CONCERN ON SITE

FROM CE Co. BMP PLAN, 4/18/83
Compound with highest score:

PCB

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

1905 GAL

Basis of estimating and/or computing waste quantity:

FROM AREAS C & E DESCRIBED, WITH PCB QUANTITIES, ON BMP PLAN,
4/18/83

* * *

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

RECREATION

FROM COOK Co. FOREST PRESERVE LITERATURE

Is there tidal influence?

No

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

NOT APPLICABLE

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

NONE PRESENT

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

NONE PRESENT

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

NONE

FROM BELLWOOD WATER DEPT, 1973, PHONE CONVERSATION W/ JIM DENNIS, CHIEF,
8/25/83

Computation of land area irrigated by above-cited intake(s) and
conversion to population (1.5 people per acre):

NONE

Total population served:

NONE

Name/description of nearest of above water bodies:

DES PLAINES RIVER

Distance to above-cited intakes, measured in stream miles.

NONE PRESENT

AIR ROUTE

1 OBSERVED RELEASE

Contaminants detected:

NONE

Date and location of detection of contaminants

N/A

Methods used to detect the contaminants:

N/A

Rationale for attributing the contaminants to the site:

N/A

* * *

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Most incompatible pair of compounds:

Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

* * *

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi

0 to 1 mi

0 to 1/2 mi

0 to 1/4 mi

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

Distance to critical habitat of an endangered species, if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

FIRE AND EXPLOSION

1 CONTAINMENT

Hazardous substances present:

PCB, NONFLAMMABLE

FROM SITE BMP PLAN, 4/13/83
Type of containment, if applicable:

N/A

* * *

2 WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

Ignitability

Compound used:

Reactivity

Most reactive compound:

Incompatibility

Most incompatible pair of compounds:

* * *

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

Basis of estimating and/or computing waste quantity:

* * *

3 TARGETS

Distance to Nearest Population

Distance to Nearest Building

Distance to Sensitive Environment

Distance to wetlands:

Distance to critical habitat:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

Population Within 2-Mile Radius

Buildings Within 2-Mile Radius

DIRECT CONTACT

1 OBSERVED INCIDENT

Date, location, and pertinent details of incident:

NONE

* * *

2 ACCESSIBILITY

Describe type of barrier(s):

FENCE, SECURITY GUARD ON 24 HR SERVICE

FROM SITE INSPECTION REPORT, 8/3/83

* * *

3 CONTAINMENT

Type of containment, if applicable:

TRANSFORMERS REST ON A GRAVEL LOT

FROM SITE INSPECTION REPORT 8/3/83

* * *

4 WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:

PCB

FROM SITE BMP PLAN, 4/13/83

Compound with highest score:

PCB

* * *

5 TARGETS

Population within one-mile radius

> 30,000 ; ALMOST ALL OF MAYWOOD (1980 POP. 27,998), AS WELL AS PORTIONS OF OTHER COMMUNITIES, LIES WITHIN 1 MI. RADIUS

OFFICIAL ILLINOIS ROAD MAP, 1983
Distance to critical habitat (of endangered species)

NONE NEARBY